

Amendment are indicated as such. The marked-up claims- showing the changes to the amended claims are attached hereto as shown on pages 1 through 3 of the separate document.

1. A seamless polishing apparatus for utilization in chemical mechanical polishing, comprising:

a polishing pad, the polishing pad being shaped like a belt and configured to have no seams; and

a base belt, the base belt including a reinforcement layer and a cushioning layer; wherein the cushioning layer is an intermediary layer between the polishing belt pad and the base belt.

2. A seamless polishing apparatus for utilization in chemical mechanical polishing as recited in claim 1, wherein the polishing pad is a polymeric material.

3. A seamless polishing apparatus for utilization in chemical mechanical polishing as recited in claim 2, wherein the polymeric material is polyurethane.

4. A seamless polishing apparatus for utilization in chemical mechanical polishing as recited in claim 1, wherein the cushioning layer is a sponge like material.

5. A seamless polishing apparatus for utilization in chemical mechanical polishing as recited in claim 1, wherein the cushioning layer is an open-celled polyurethane material.

6. (Amended) A seamless polishing apparatus for utilization in chemical mechanical polishing as recited in claim 1, wherein the reinforcement layer is one of stainless steel and a Kevlar-type material.

7. A seamless polishing apparatus for utilization in chemical mechanical polishing as recited in claim 1, wherein the polishing pad is about 40 mils in thickness.

8. A seamless polishing apparatus for utilization in chemical mechanical polishing as recited in claim 1, wherein the cushioning layer is about 20 mils in thickness.

9. A seamless polishing apparatus for utilization in chemical mechanical polishing as recited in claim 1, further comprising:

a cap covering an adhesive film between the base belt and the polishing pad.

10. A seamless polishing apparatus for utilization in chemical mechanical polishing as recited in claim 9, wherein the cap is a polymeric material.

11. A seamless polishing apparatus for utilization in chemical mechanical polishing as recited in claim 1, further comprising:

a cover configured to seal off an adhesive film between the base belt and the polishing pad from moisture intrusion.

12. A seamless polishing apparatus for utilization in chemical mechanical polishing as recited in claim 1, wherein the base belt and the polishing pad are attached by a first adhesive film, and the reinforcement layer and the cushioning layer are attached by a second adhesive film.

13. (Amended) A seamless polishing apparatus for utilization in chemical mechanical polishing, comprising:

a polishing pad, the polishing pad being shaped like a belt and configured to have no seams; and

a base belt, the base belt including a reinforcement layer and a cushioning layer, the reinforcement layer being one of stainless steel and a Kevlar-type material;

wherein the cushioning layer is an intermediary layer between the continuous pad and the reinforcement layer.

14. A seamless polishing apparatus for utilization in chemical mechanical polishing as recited in claim 13, wherein the polishing pad is a polymeric material.

15. A seamless polishing apparatus for utilization in chemical mechanical polishing as recited in claim 13, wherein the polishing pad is between about 30 mils and about 100 mils in thickness.

16. A seamless polishing apparatus for utilization in chemical mechanical polishing as recited in claim 13, wherein the cushioning layer is between about 10 mils and about 100 mils in thickness.

17. A seamless polishing apparatus for utilization in chemical mechanical polishing as recited in claim 13, wherein the reinforcement layer is between about 5 mils and about 50 mils in thickness.

18. (Amended) A polishing structure for utilization in chemical mechanical polishing, comprising:

a polishing pad, the polishing pad being shaped like a belt and configured to be a contiguous unit, the polishing pad being made of a polymeric material; and

a base belt, the base belt including a reinforcement layer and a cushioning layer, the reinforcement layer being one of stainless steel and a Kevlar-type material;

wherein the cushioning layer is an intermediary layer between the polishing pad and the reinforcement layer, the cushioning layer being a polymeric material.

19. (Amended) A polishing structure for utilization in chemical mechanical polishing as recited in claim 18, wherein the reinforcement layer and the cushioning layer are attached by a first adhesive film, and the cushioning layer and the polishing pad are attached by a second adhesive film.

20. (Amended) A seamless polishing apparatus for utilization in chemical mechanical polishing, comprising:

a polishing pad, the polishing pad being shaped like a belt and configured to be a contiguous unit and to have grooves on a pad surface, the polishing pad being made up of polyurethane; and

a base belt, the base belt including a reinforcement layer and a cushioning layer, the reinforcement layer being one of stainless steel and a Kevlar-type material, the reinforcement layer and the cushioning layer being attached by way of a first adhesive film, the base belt and the polishing pad being attached by way of a second adhesive film;

wherein the cushioning layer is an intermediary between the polishing pad and the reinforcement layer, the cushioning layer being a polyurethane material.

21. A seamless polishing apparatus for utilization in chemical mechanical polishing as recited in claim 20, wherein the polishing pad is between about 40 mils in thickness.

22. A seamless polishing apparatus for utilization in chemical mechanical polishing as recited in claim 20, wherein the cushioning layer is about 20 mils in thickness.

23. A seamless polishing apparatus for utilization in chemical mechanical polishing as recited in claim 20, wherein the reinforcement layer is about 20 mils in thickness.

24. A seamless polishing apparatus for utilization in chemical mechanical polishing, comprising:

a polishing pad, the polishing pad being shaped like a belt and configured to be a contiguous unit;

a base belt, the base belt including a reinforcement layer and a cushioning layer; and

a cap covering an adhesive film between the base belt and the polishing pad;

wherein the cushioning layer is an intermediary between the continuous pad and the base belt.

25. A seamless polishing apparatus for utilization in chemical mechanical polishing as recited in claim 24, wherein the polishing pad is polyurethane.

26. (Amended) A seamless polishing apparatus for utilization in chemical mechanical polishing as recited in claim 24, wherein the reinforcement layer is one of stainless steel and a Kevlar-type material.

27. (Amended) A seamless polishing apparatus for utilization in chemical mechanical polishing, comprising:

a polishing pad, the polishing pad being shaped like a belt and configured to have no seams, and the polishing pad being made of a polymeric material, and the polishing pad being between about 30 mils and about 100 mils in thickness and configured to have a grooved top surface; and

a base belt, the base belt including a reinforcement layer and a cushioning layer, the reinforcement layer being one of stainless steel and a Kevlar-type material, and the cushioning layer being between about 10 mils and about 100 mils in thickness, and the reinforcement layer being between about 5 mils and 50 mils in thickness;

wherein the cushioning layer is an intermediary layer between the polishing belt pad and the base belt.

28. A method for generating a polishing pad structure for utilization in chemical mechanical polishing, comprising:

providing a reinforcement layer;

applying a first adhesive film over the reinforcement layer;

attaching a cushioning layer on the first adhesive film;

applying a second adhesive film over the cushioning layer;

attaching a seamless polishing pad on the second adhesive film; and

curing the polishing pad structure.

29. (Amended) A method for generating a polishing pad structure for utilization in chemical mechanical polishing as recited in claim 28 wherein the reinforcement layer is one of stainless steel and a Kevlar-type material.

30. A method for generating a polishing pad structure for utilization in chemical mechanical polishing as recited in claim 28 wherein the first adhesive layer and the second adhesive layer is a rubber based adhesive.

31. A method for generating a polishing pad structure for utilization in chemical mechanical polishing as recited in claim 28 wherein the seamless polishing pad is generated by pouring a polymeric gel into a mold.

32. A method for generating a polishing pad structure for utilization in chemical mechanical polishing as recited in claim 28 wherein the seamless polishing pad is a polymeric material.

33. A method for generating a polishing pad structure for utilization in chemical mechanical polishing as recited in claim 28 wherein the curing includes heating the polishing pad structure.

34. A method for generating a polishing pad structure for utilization in chemical mechanical polishing, comprising:

providing a reinforcement layer;

applying a first adhesive film on the reinforcement layer;

attaching a cushioning layer on the first adhesive film;

applying a second adhesive film on the cushioning layer;

attaching a seamless polymeric polishing pad on the second adhesive layer, the polymeric polishing pad having a grooved top surface; and

curing the polishing pad structure between about 12 hours to about 48 hours at a temperature of between about 150 F to 300 F.